

REMARKS/ARGUMENTS

Favorable consideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 2-6 and 8-20 are presently pending in this application, Claims 2-6, 8-11, 13-16 and 18-20 having been withdrawn from further consideration by the Examiner, Claims 1 and 7 having been canceled and Claims 12 and 17 having been amended by the present amendment.

In the outstanding Office Action, the drawings were objected to because of informalities; the specification was objected to as failing to provide proper antecedent basis for the claimed subject matter; Claims 1, 7 and 17 were rejected under 35 U.S.C. §102(b) as being anticipated by Lewis et al. (U.S. Patent 3,974,647); Claims 1, 7, 12 and 17 were rejected under 35 U.S.C. §102(b) as being anticipated by Johnson et al. (U.S. Patent 5,417,056); Claims 1, 7, 12 and 17 were rejected under 35 U.S.C. §102(b) as being anticipated by Cowan et al. (U.S. Patent 4,199,936); Claims 1, 7, 12 and 17 were rejected under 35 U.S.C. §102(e) as being anticipated by Sattinger et al. (U.S. Patent 6,530,221); Claims 1, 7 and 17 were rejected under 35 U.S.C. §102(b) as being anticipated by EP 0576717 (hereinafter "EP '717"); Claims 1, 7 and 17 were rejected under 35 U.S.C. §102(b) as being anticipated by EP 0971172 (hereinafter "EP '172"); Claims 1, 7, 12 and 17 were rejected under 35 U.S.C. §102(b) as being anticipated by GB 2309296 (hereinafter "GB '296"); Claims 1, 7 and 17 were rejected under 35 U.S.C. §102(b) as being anticipated by EP 0971172 (hereinafter "EP '172"); Claims 1, 7, 12 and 17 were rejected under 35 U.S.C. §102(e) as being anticipated by JP 2001-90939 (hereinafter "JP '939"); Claim 12 was rejected under 35 U.S.C. §103(a) as being unpatentable over any of Johnson et al., Cowan et al., Sattinger et al., EP '717, EP '172 or GB '296, and further in view of Napoli (U.S. Patent 5,279,127).

In response to the objection to the drawings, submitted herewith is a separate LETTER SUBMITTING DRAWING SHEETS, submitting for approval changes to Figs. 16A, 16B, 17A and 17B. Specifically, the respective figures have been amended to add the legend "Background Art." Also, the noted Reference Numeral "105" at page 1, line 32, have been deleted herein.

With regard to the objection to the specification, Claim 1 has been canceled herein and thus this objection is now moot.

Claims 12 and 17 have been amended herein. Specifically, Claim 12 has been rewritten in independent form, Claim 17 has been amended to depend from Claim 12, and furthermore, Claims 12 and 17 have been amended to clarify the subject matter recited therein. Hence, no new matter is believed to be added thereby. If, however, the Examiner disagrees, the Examiner is invited to telephone the undersigned who will be happy to work in a joint effort to derive mutually satisfactory claim language.

Briefly recapitulating, Claim 12 of the present invention is directed to a gas turbine combustor and the gas combustor includes an acoustic energy absorbing wall configured to absorb acoustic energy of a combustion variation, the acoustic energy absorbing wall including a perforated plate and a back plate, the back plate being disposed outside the perforated plate in a radial direction and spaced apart from the perforated plate by a gap, wherein the perforated plate has openings which are positioned such that a distance $L1$ between the openings in a longitudinal direction and a distance $L2$ between the openings in a circumferential direction have a relationship of $0.25 \leq L1 / L2 \leq 4$. By providing such an acoustic energy absorbing wall, the gas turbine combustor according to Claim 12 prevents combustion oscillations more effectively.

Johnson et al. disclose a suppressor for a gas turbine engine augmentor. Nevertheless, Johnson et al. are not believed to teach "an acoustic energy absorbing wall configured to

absorb acoustic energy of a combustion variation, the acoustic energy absorbing wall including a perforated plate and a back plate, the back plate being disposed outside the perforated plate in a radial direction and spaced apart from the perforated plate by a gap, wherein the perforated plate has openings which are positioned such that a distance L1 between the openings in a longitudinal direction and a distance L2 between the openings in a circumferential direction have a relationship of $0.25 \leq L1 / L2 \leq 4$ ” as recited in Claim 12. Johnson et al. simply disclose the screech suppressor portion 49 in the augmentor liner 48, and do not disclose or even suggest what ratio of the distances between its openings in longitudinal and circumferential directions is. Although the outstanding Office Action asserts that Figure 7 of Johnson et al. discloses the perforation pattern as recited in Claim 12, nowhere do Johnson et al. disclose any distance relationships for perforations. Nor do Johnson et al. disclose any measurements for their figures. Therefore, the structure recited in Claim 12 is believed to be distinguishable from Johnson et al.

Likewise, Cowan et al., Sattinger et al., EP ‘717, EP ‘172, GB ‘296, JP ‘939 and Napoli are not believed to “an acoustic energy absorbing wall configured to absorb acoustic energy of a combustion variation, the acoustic energy absorbing wall including a perforated plate and a back plate, the back plate being disposed outside the perforated plate in a radial direction and spaced apart from the perforated plate by a gap, wherein the perforated plate has openings which are positioned such that a distance L1 between the openings in a longitudinal direction and a distance L2 between the openings in a circumferential direction have a relationship of $0.25 \leq L1 / L2 \leq 4$ ” as recited in Claim 12. Thus, the structure recited in Claim 12 is also believed to be distinguishable from Cowan et al., Sattinger et al., EP ‘717, EP ‘172, GB ‘296, JP ‘939 and Napoli.

Because none of Johnson et al., Cowan et al., Sattinger et al., EP ‘717, EP ‘172, GB ‘296 and Napoli discloses the acoustic energy absorbing wall as recited in Claim 12, even the

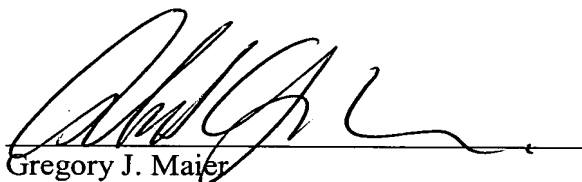
combined teachings of these cited references would not in any way render the structure recited in Claim 12 obvious.

For the foregoing reasons, Claim 12 is believed to be allowable. Furthermore, since Claim 17 has been amended to depend from Claim 12, substantially the same arguments set forth above also apply to this dependent claim. Hence, Claim 17 is believed to be allowable as well.

In view of the amendments and discussions presented above, Applicants respectfully submit that the present application is in condition for allowance, and an early action favorable to that effect is earnestly solicited.

Respectfully submitted,

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